

PRODUCT INFORMATION



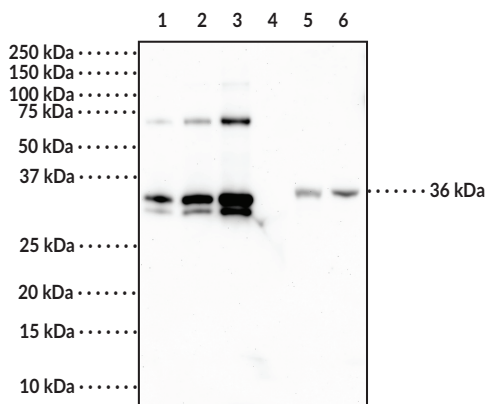
HO-2 Monoclonal Antibody (Clone 5D10)

Item No. 25691

Overview and Properties

Contents: This vial contains 500 µg of protein G-purified monoclonal antibody.
Synonyms: Heme Oxygenase-2, HMOX2, HO-2
Immunogen: Full length human recombinant HO-2 protein
Cross Reactivity: (-) HO-1
Species Reactivity: (+) Human HO-2
Uniprot No.: P30519
Form: Liquid
Storage: -20°C (as supplied)
Stability: ≥3 years
Storage Buffer: PBS, pH 7.2, with 50% glycerol and 0.02% sodium azide
Clone: 5D10
Host: Mouse
Isotype: IgG1
Applications: ELISA and Western blot (WB); the recommended starting dilution for ELISA is 1:500 and 1:200 for WB. Other applications were not tested, therefore optimal working concentration/dilution should be determined empirically.

Image



Lane 1: HO-2 Recombinant Protein (0.001 µg)
Lane 2: HO-2 Recombinant Protein (0.005 µg)
Lane 3: HO-2 Recombinant Protein (0.02 µg)
Lane 4: HO-1 Recombinant Protein (0.1 µg) [negative control]
Lane 5: A549 Cell Lysate (50 µg)
Lane 6: HeLa Heat Shock Cell Lysate (30 µg)

Representative gel image shown

WARNING
THIS PRODUCT IS FOR RESEARCH ONLY - NOT FOR HUMAN OR VETERINARY DIAGNOSTIC OR THERAPEUTIC USE.

SAFETY DATA
This material should be considered hazardous until further information becomes available. Do not ingest, inhale, get in eyes, on skin, or on clothing. Wash thoroughly after handling. Before use, the user must review the complete Safety Data Sheet, which has been sent via email to your institution.

WARRANTY AND LIMITATION OF REMEDY
Buyer agrees to purchase the material subject to Cayman's Terms and Conditions. Complete Terms and Conditions including Warranty and Limitation of Liability information can be found on our website.

Copyright Cayman Chemical Company, 12/05/2023

CAYMAN CHEMICAL
1180 EAST ELLSWORTH RD
ANN ARBOR, MI 48108 · USA
PHONE: [800] 364-9897
[734] 971-3335
FAX: [734] 971-3640
CUSTSERV@CAYMANCHEM.COM
WWW.CAYMANCHEM.COM

PRODUCT INFORMATION



Description

Heme oxygenase-2 (HO-2) is a constitutively active heme oxygenase encoded by the *HMOX2* gene.^{1,2} It is a membrane-bound enzyme that catalyzes the cleavage of heme to give carbon monoxide (CO), ferrous ions (Fe^{2+}), and biliverdin, with biliverdin being further processed into bilirubin. HO-2 is found in neurons, testes, and endothelial and smooth muscle cells from cerebral vessels.² HO-2 protects against apoptotic neuronal cell death in models of ischemic injury and oxidative stress. It also acts as an oxygen sensor to inhibit systemic vascular reactivity and reduce cell death in response to hypoxia. Cayman's HO-2 Monoclonal Antibody (Clone 5D10) can be used for Western blot and ELISA applications. The antibody recognizes HO-2 at 36 kDa from human samples.

References

1. Maines, M.D. The heme oxygenase system: A regulator of second messenger gases. *Annu. Rev. Pharmacol. Toxicol.* **37**, 517-554 (1997).
2. Muñoz-Sánchez, J. and Cháñez-Cárdenas, M.E. A review on hemeoxygenase-2: Focus on cellular protection and oxygen response. *Oxid. Med. Cell. Longev.* **2014:604981** (2014).

CAYMAN CHEMICAL
1180 EAST ELLSWORTH RD
ANN ARBOR, MI 48108 · USA
PHONE: [800] 364-9897
[734] 971-3335
FAX: [734] 971-3640
CUSTSERV@CAYMANCHEM.COM
WWW.CAYMANCHEM.COM